

8.—*Eucalyptus forrestiana* subsp. *dolichorhyncha*, a new taxon from Western Australia

by M. I. H. Brooker¹

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Abstract

Eucalyptus forrestiana subsp. *dolichorhyncha* is described. Its distribution, historical status and relationship to *E. forrestiana* subsp. *forrestiana* are discussed.

Eucalyptus forrestiana Diels subsp. *dolichorhyncha* M. I. H. Brooker subsp. nov. SLOBEB (Pryor and Johnson 1971).

A subspecies typica operculo in rostrum elongatum 1-3 cm longum contracto et alabastris fructibusque plerumque minoribus in pedicellis brevioribus differt.

A subspecies differing from the typical form in the operculum which is abruptly contracted into an elongated beak, 1-3 cm long, and in the buds and fruit which are generally smaller and for shorter pedicels. (Figures 1, 2.)

Herbarium material

Holotype: Grasspatch, Western Australia, J. W. Green 1252, 16.iii.1957.

Other specimens: Grasspatch, C. A. Gardner 2225 (NSW, PERTH) 22.v.1924, C. A. Gardner and W. E. Blackall 1070 (PERTH) 15.x.1931, C. A. Gardner (PERTH, FRI.) 31.i.1935, G. H. Burvill (PERTH) 6.viii.1959; Salmon Gums, R. Stamford (PERTH, NSW) 17.vii.1924; south of Grasspatch, J. H. Willis (MEL. 1009877) 1.ix.1947; 2 miles south of Grasspatch, L. A. S. Johnson (NSW) 18.xii.1960; 2 miles south of Red Lake, R. D. Royce 4060 (PERTH) 18.iv.1953; 14 miles north of Gibson, M. E. Phillips (CBG 021991, FRI) 5.xi.1962; 18.7 miles south of Salmon Gums, G. M. Chippendale 180 (FRI, MEL) 13.iii.1967; 532 mile peg between Norseman and Esperance, S. G. M. Carr 639 (PERTH) 1.iv.1968; Gibson, A. Kessell 880 (PERTH) 11.vi.1969; 13.7 miles south of Salmon Gums, M. I. H. Brooker 2501, 2502 (PERTH) 15.ii.1970; 10 miles south of Peak Eleanora, J. S. Beard 5867 (King's Park) 30.iii.1970. General distribution is from Salmon Gums to Gibson on the Norseman-Esperance road.

Discussion

Subspecies *dolichorhyncha* has been widely referred to in literature and horticulture as *E. forrestiana*. Its limited area of distribution is crossed by the Norseman-Esperance road in a region where to both the west and east, subsp. *forrestiana* occurs over a wide tract of country, which has until recently been largely inaccessible (Beard 1973). Consequently subsp. *forrestiana* has probably been sampled far less frequently than subsp. *dolichorhyncha* and the latter rather than the former, has been regarded as typical. Nevertheless, both forms exist in Australian herbaria and both have been planted for ornamental purposes without taxonomic significance being attached to their differences.

In the original description of *E. forrestiana* (1905), Diels stated that the operculum was pyramidal and illustrated it as such. Maiden (1917) made no reference to any unusual forms of the species and the illustration in the "Critical Revision" (Plate 95, nos. 1, 2), is very close to Diels' original. Maiden (1929) made a further reference to *E. forrestiana* in which he referred to the "long rostrate operculum" of a specimen from Grasspatch (C. A. Gardner 2225), but he did not comment on the significance of the variation. This specimen, illustrated in Plate 283 (no. 6B), is subsp. *dolichorhyncha*.

Gardner (1933) considered that Diels had described an aberrant form in respect of the operculum or alternatively that the beak of the

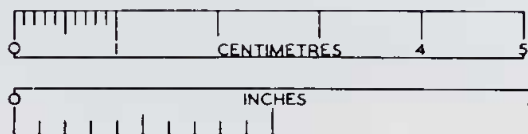


Figure 1.—A bud of *Eucalyptus forrestiana* subsp. *forrestiana*.

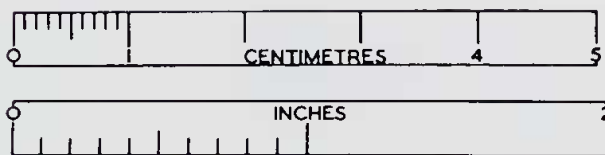


Figure 2.—A bud of *Eucalyptus forrestiana* subsp. *dolichorhyncha*.

¹Forestry and Timber Bureau, Canberra, A.C.T. 2600

operculum had become detached from Diels' specimen. Evidence from recent field collections and from progeny which have been raised to the bud stage (Beard 1973) show that subsp. *forrestiana* does not produce a long beaked operculum. The bud apex is frequently scarred, however, and it is probably on this feature that Gardner based his suggestion that the beak had become detached. Blakely's redescription of *E. forrestiana* (1934) refers in part to subsp. *dolichorhyncha*.

A specimen of historical interest collected by Diels and Pritzel is Pritzel 479 (Perth) whose buds have opercula intermediate in morphology between those typical for the subspecies. From correspondence with the Director of the Botanisches Museum, Berlin-Dahlem, where it is presumed the type specimen of *E. forrestiana* was lodged and subsequently destroyed, it is not known what the relationship between Pritzel 479 and Diels 5331 (the type) is. If Diels 5331 is not extant we must take Diels' description and drawing as typical of *E. forrestiana* and regard Pritzel 479 as either an intermediate form—a possibility not unlikely between two closely

related forms whose distributions we know to be overlapping in some localities, or an immature bud variant.

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